

lower ends adjacent their vertical edges. In a similar manner, the panels of the intermediate course are fitted above the panels of the lower course, with the downwardly projecting spigots 14 of each panel of the intermediate course being inserted in the upper ends of the bores of the respective connecting members 18 into which project upwardly, from below, the corresponding upwardly projecting spigots 14 of the respective frames of the lower course. In the arrangement shown, the uppermost course of panels 8a is assembled in like manner over the intermediate course of panels, the panels 8a being linked together at their upper ends by respective top caps 19 each providing two downwardly open sockets to receive the upwardly projecting spigots of the adjacent uprights of adjoining panels 8a, the caps 19 constituting a further form of connector element.

Referring to FIG. 4, in a corresponding structure embodying the invention, in the region of at least one pair of adjoining said vertical arrays of uprights, instead of the frames 8, 8a being inter-connected by first connector elements such as 18, 19, which are entirely independent of one another, the connecting elements associated with the respective pair of vertical arrays of uprights are secured to a respective vertical bracing rail 22, normally disposed on the side of the structure which is not intended to be exposed to view. Each rail 22 is in the form of an extrusion, for example of aluminum alloy, of the cross-sectional form shown in FIG. 5, providing a planar central web 26 and, adjacent either edge of the web 26, similar channel formations 24, the open sides of the channel formations facing the opposite directions, parallel with the plane of the central web 26. Each channel formation includes a base wall 27 forming the bottom of the respective channel and extending perpendicular to the web 26 and side portions 28 defining the sides of the channel and extending generally parallel with the web 26. Each of the side portions 28 is extended past the base wall 27 in the direction towards the other channel formation to provide flanges 30 on either side of the web 26. The channel afforded by each channel formation 24 includes a portion adjacent the base wall 27 which is relatively wide in the direction perpendicular to the plane of web 26 and a portion, extending from said relatively wide portion to the mouth of the channel, which is somewhat narrower, but flares so as to increase in width from the junction with the wider portion to the mouth of the channel. Thus, each channel has an approximately T-section interior profile. The rail 22 is arranged with one channel 24 adjacent the frames 8, 8a and the web 26 extending from that channel, away from the frames 8, 8a to the other channel 24.

The rectangular panels 8, 8a of the structure are secured to the rail 22 by way of second connector elements 34 (FIGS. 4, 6 and 7), which replace one or more of the vertical arrays of the first connector elements 18, 19 in the arrangement in accordance with FIGS. 1 to 3d. FIG. 10 shows the cross-sectional form of one such connector element. The particular element shown in FIG. 10 is of composite form and comprises a first part 36 engaging in the respective channel formation 24 nearer the panels and a three-way socket element 38, secured to the element 36 and providing three vertically extending parallel passages 40 each in the form of a cylindrical bore interrupted by a slot, with the slots intercommunicating with one another.

The bore of each of the passages 40 is of a diameter to receive snugly, from above and/or below, a spigot 14.

The element 38 also has, on its exterior, on one face thereof, a shallow channel 42, which receives a corresponding rib or key 44 provided on member 36. On either side of the key 44, the member 36 provides shoulders 46 which engage the opposing external face of the member 38. At its side remote from the member 38, the member 36 is generally rectangular in cross-section having an edge face 48 parallel with shoulders 46 and, perpendicular thereto, side faces 50 parallel with one another. The transverse spacing between the two faces 50 is somewhat greater than the minimum transverse width of the channel in the channel member 24, but somewhat less than the transverse width of the portion of the channel nearest the base part 27 and each face 50, adjacent the end face 48, is provided with a respective groove 52 which accommodates the inwardly projecting edge of the sloping portion of the channel wall which defines, with the corresponding opposing channel portion, the flaring part of the channel. The member 36 is thus held captive in the channel member 24 and extends out of the mouth of the channel member to the member 38. In the arrangement shown, the member 38 is secured to the member 36 by means of screws 55 received in transverse bores in the member 36 and in screw-threaded engagement with screw-threaded bores formed in the member 38, the heads of the screws 55 being countersunk in a shallow channel formed in the edge face 48 of member 36. Also secured in this shallow channel, between the heads of the two screws 55, is a strip 58 (FIG. 11) of resilient fabric adhesively secured to the member 36 and providing a resilient pile bearing against the opposing face of the base part 27 to take up clearance between the face 48 and the base part 27 and hold the member 36 firmly in the channel. The member 36, with the member 38 secured thereto, is slid into the channel 24 from one end of the rail.

The members 36 and 38 are preferably formed from lengths cut off respective aluminium extrusions of the cross-sectional forms shown. In use, in an arrangement such as shown in FIG. 1, where each course of frames 8, 8a consists of only a single series of frames, at the location of the pair of vertical arrays of uprights connected by connector elements 34 with the rail, the uprights of the two arrays may be aligned with, and their spigots 14 inserted in, the passages 40 which are on laterally opposite sides of each element 38, or one array of uprights may be aligned with and their spigots 14 inserted in, the central passages 40 of the elements 38 and the uprights of the other array of the pair may be aligned with, and have their spigots 14 inserted in, one of the two other sets of passages 40. Furthermore three vertical rows of frames 8, 8a disposed in respective ones of three planes radiating from the vertical axis of the connector elements 38 of the same rail, may be connected with their respective uprights adjacent one another by said uprights being aligned with and having their spigots 14 inserted in, respective ones of the three passages 40 in each of the elements 38. Alternatively a rail 22 may be disposed at a vertical edge of the structure with only a single array of uprights connected with the rail by having their spigots 14 inserted in only one of the three sets of passages 40 of the elements 34.

If desired, the members 36 and 38 may be formed integrally with one another, as a single extrusion, in which case, of course, the screws 55 are dispensed with. In order to locate the lower end of the rail 22 with respect to the base member 16 which receives the spigots 14 at the lower ends of the pair of vertical arrays of